**Heat and Temperature Study Sheet For Quiz #3** **Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Make study cards for each of the following concepts:

Radiation Convection Insulators Radiation

Conductors Solids Liquids Gas

Absolute Zero Thermal Expansion Kelvin Scale Celsius Scale

R-Values Solar Energy Infrared images Temperature

Space heater Thermostat Bimetallic Strip compressed

Wind Energy Fossil Fuels Central Heating System

Hyrdo-electric energy Boiling point of water Freezing point of water

Adding salt to ice Changing boiling point Particle Model of Matter

1. Be sure you understand the Celsius and Kelvin temperature scales. Some key temperatures to know on BOTH scales include: Absolute zero, freezing point of water, boiling point of water (at sea level, on Mt. Everest, and in Alberta), and room temperature.
2. You should be able to explain, draw and label how a bimetallic strip works (before and after heated)
3. Study Particle Model of Matter:

* Know how to **draw** the particles of solids, liquids and gases
* Be able to explain how solids liquids and gases move
* Be able to explain how much space is between molecules of solids, liquids and gases
* Know which states of matter (solids, liquids and gases) can be compressed and which ones can’t be compressed
* Explain which states of matter have a definite shape and which take the shape of the container they are in
* Understand that most solids expand when heated and contract when cooled (except water which expands when frozen)
* Remember that hot air rises and expands. This makes the heated air less dense than cool air.